

### Rocky Flats Surface Water from the September 2013 Rain Event

Location	Carboy Start-Finish	Carboy Retrieval	Number of 200 ml Grabs	Analyte	Result – DOE Lab	Result – State Lab <sup>1</sup>	Units <sup>2</sup>	DOE Comments
WALPOC [Walnut Creek POC]	6/4/2013 - 9/12/2013	9/13/2013 14:54	231	Am-241	0.0 / 0.015	0.006	pCi/L	26 of the grabs were collected prior to 9/11/2013. Results shown are real/duplicate.
				Pu-239/240	0.021 / 0.031	0.016	pCi/L	
				U total	3.21 / 3.21	3.1	µg/L	
WOMPOC [Woman Creek POC]	6/6/2013 - 9/12/2013	9/13/2013 12:23	250	Am-241	0.003 / 0.011	< 0.13	pCi/L	6 of the grabs were collected prior to 9/11/2013. Results shown are real/duplicate.
				Pu-239/240	0.019 / 0.056	<0.02	pCi/L	
				U total	6.78 / 7.43	6.6	µg/L	
SW027 [S. Interceptor Ditch]	2/4/2013 - 9/12/2013	9/13/2013 13:17	109	Am-241	0.020 / 0.032	0.022	pCi/L	6 of the grabs were collected prior to 9/11/2013. Results shown are real/duplicate.
				Pu-239/240	0.111 / 0.104	0.03	pCi/L	
				U total	1.86 / 1.96	1.5	µg/L	
GS03 [Walnut Cr. at Indiana St]	9/12/2013 - 9/14/2013	9/14/2013 9:50	251	Am-241	0.032	< 0.05	pCi/L	Carboy was full from 9/14/2013 at 6:43 to 9/14/2013 at 9:50.
				Pu-239/240	0.042	0.017	pCi/L	
				U total	2.150	1.9	µg/L	

<sup>1</sup> Split samples analyzed by the CDPHE Laboratory Services Division

<sup>2</sup> pCi/L = picocuries (trillionths of a Curie) per liter; µg/L = micrograms (millionths of a gram) per liter

For comparison, the state's surface water standard for plutonium is 0.15 pCi/L (the MCL used at municipal water treatment plants is 15 pCi/L for alpha radiation emitters); the state standard for americium is 0.15 pCi/L; the state standard for uranium is 16.8 µg/L (MCL is 30 µg/L).